

EPA Regulatory Requirements Lowell Consent Decree



**CITY *of*
LOWELL**

**LOWELL REGIONAL
WASTEWATER UTILITY**

December 12, 2023



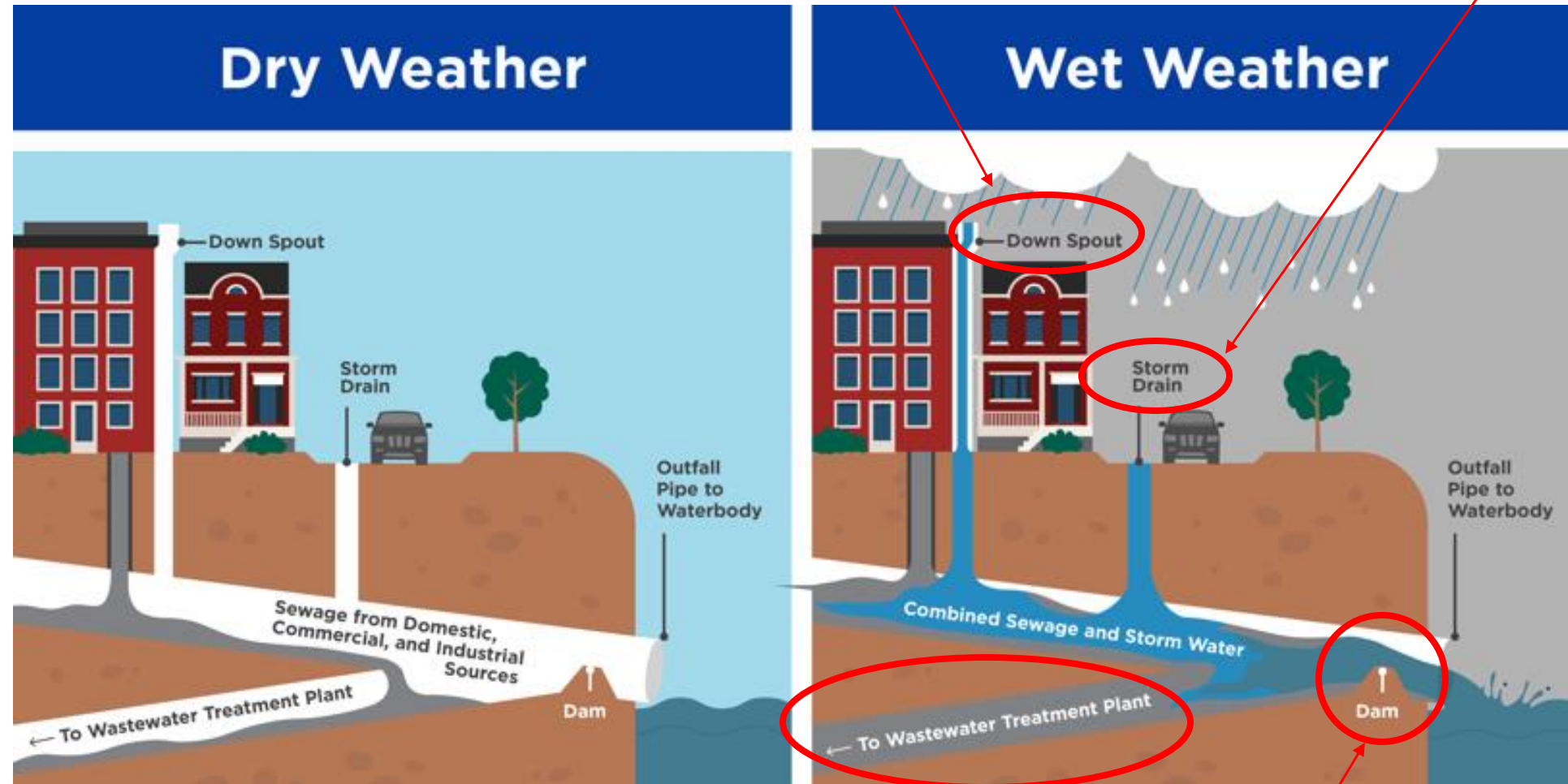
What is a Combined Sewer Overflow (CSO)?

Private Inflow

Public Inflow

Dry Weather

Wet Weather



By Federal and State mandate, LRWWU must monitor and eventually remove or control all CSO discharges to rivers.

Currently, the City has 9 CSO outfalls that contribute 330 million gallons of combined sewer to the Merrimack and Concord Rivers and Beaver Brook in a typical year.

Sanitary flow AND stormwater conveyed for treatment

Untreated CSO discharge

Consent Decree

An EPA consent decree is a court order between the EPA and Lowell that resolves violations of the Clean Water Act (CWA) mainly related to combined sewer overflows (CSOs)

Municipality	Sewer Separation	Ongoing Maintenance	Infiltration & Inflow (I/I)	Stormwater (MS4)
Lowell, MA	X	X	X	X
Haverhill, MA	X	X	X	X
Lawrence, MA		X	X	X
Nashua, NH	X		X	
Manchester, NH	X			
Quincy, MA		X	X	X
Lynn, MA	X	X	X	X

Lowell Regulatory CSO History

- 1988: Original Consent Decree
- 1990: Combined Sewer Overflow Plan
- 1998: Sewer Separation Preliminary Plan
- 2002: Phase 1 CSO Long-Term Control Plan
 - **2003-2014 \$90 Million spent towards CSO reduction**
- 2014: Phase II CSO Long-Term Control Plan
 - **2015-2019 \$15 Million spent towards CSO reduction**
- 2019: Phase III CSO Long-Term Control Plan
- 2022-2023: New Consent Decree Negotiations

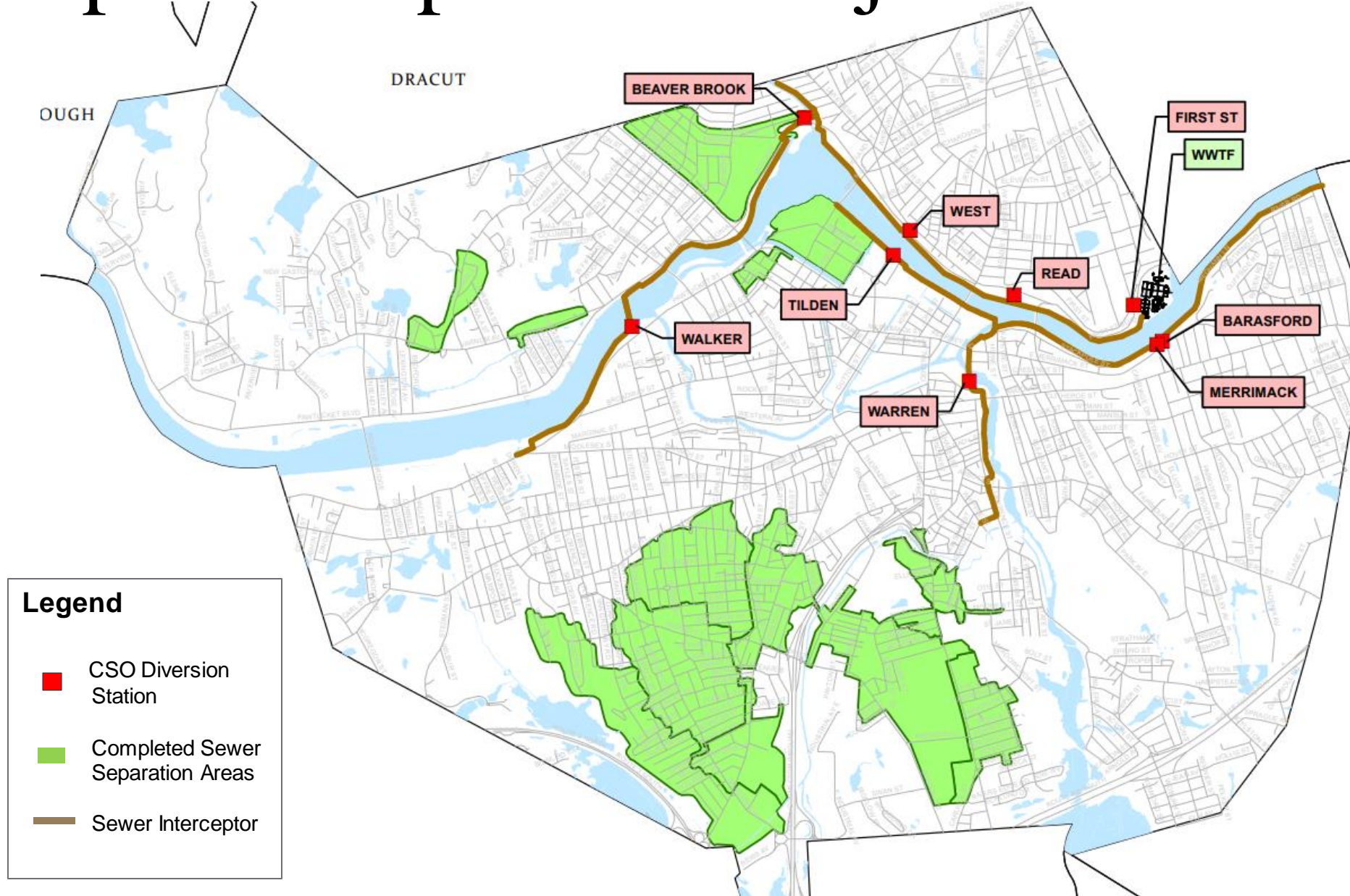


Before
**2006 Sixth/Emery Sewer
Separation Project**



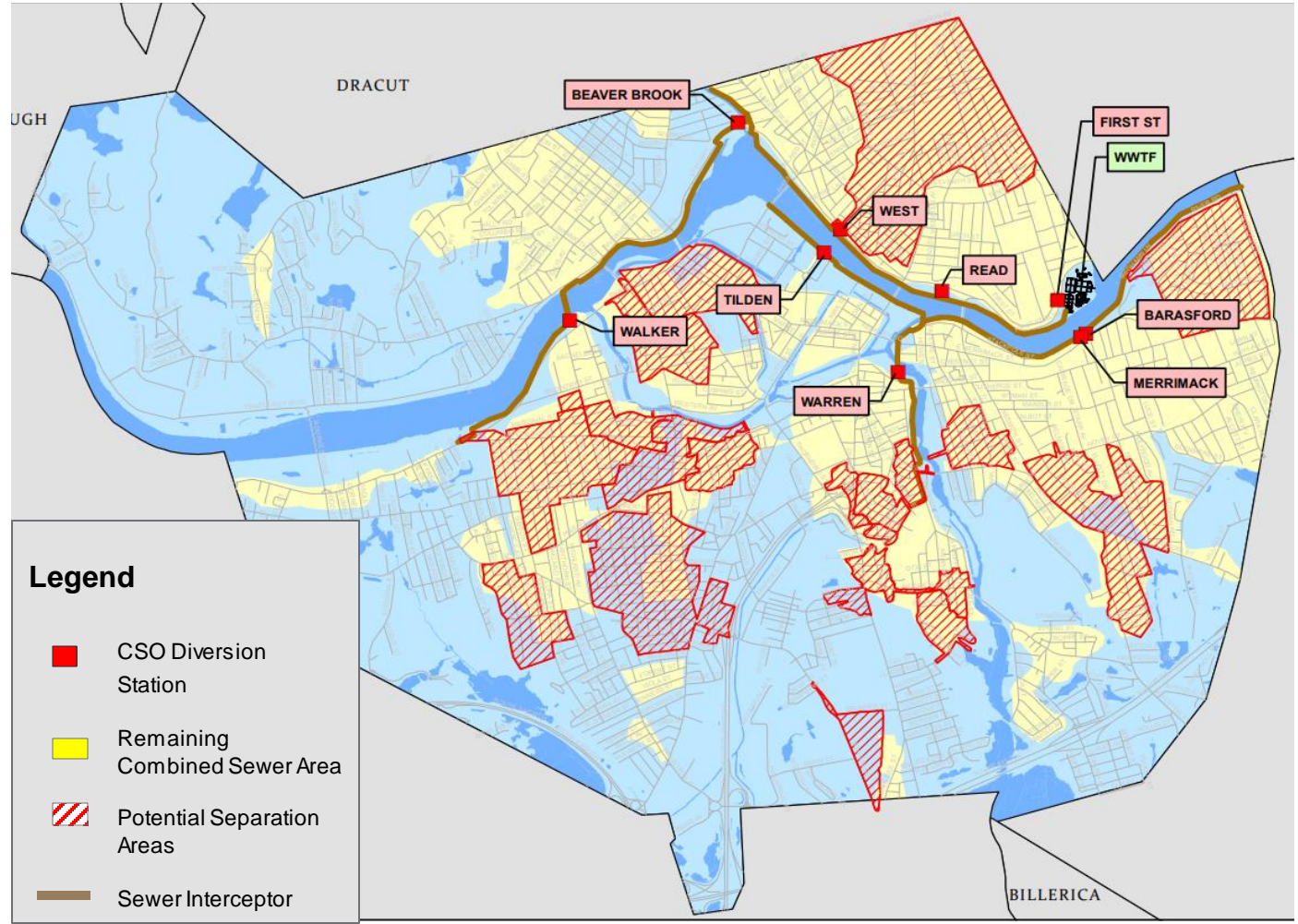
After

Completed Separation Projects Since 2003



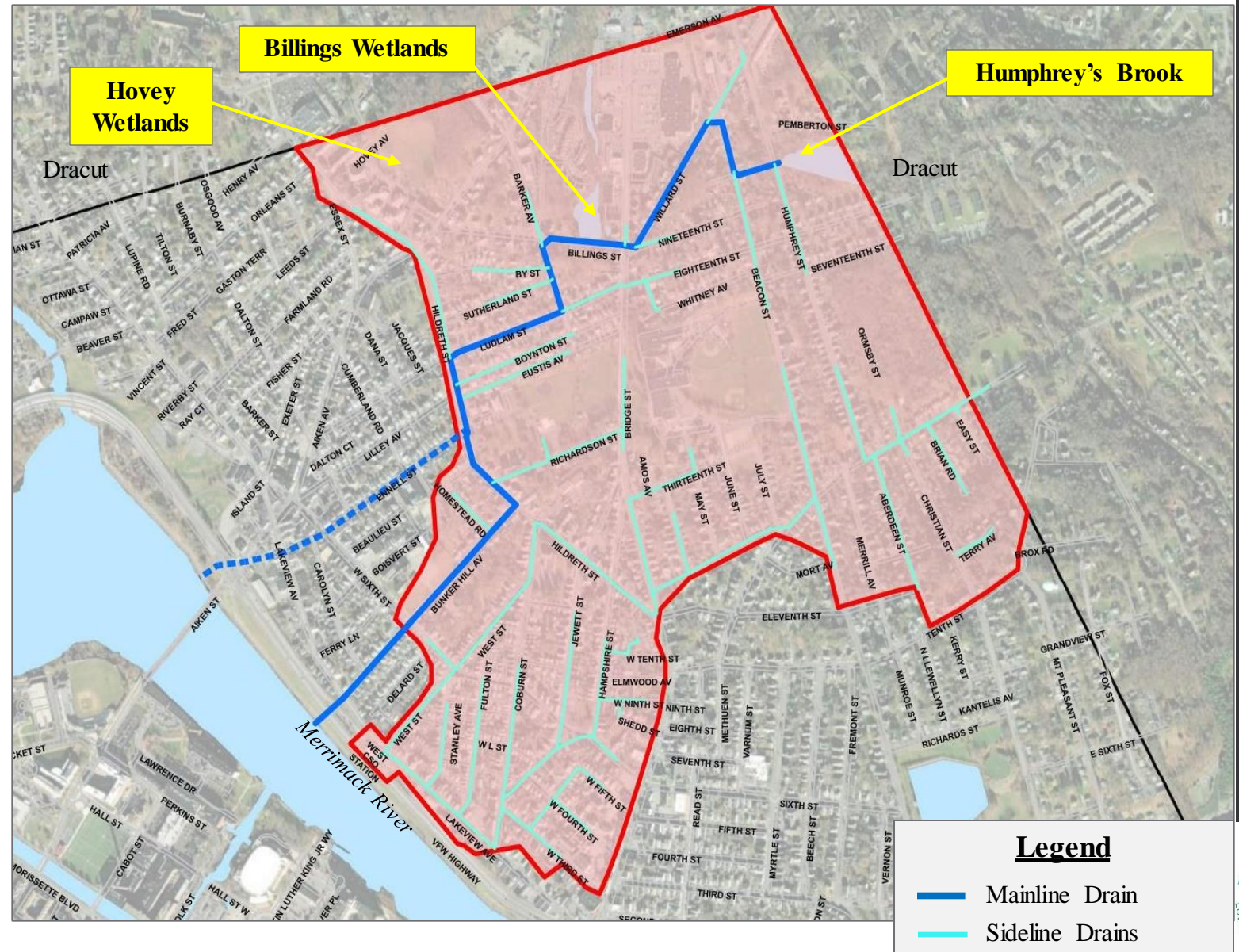
Consent Decree Sewer Separation Mandates

- **Sewer Separation Targets:**
 - Centralville
 - Other Potential Areas Approved by EPA
- **Assessment based on:**
 - **CSO reduction**
 - **Sewer surcharging, street flooding and basement backups**
 - Cost and constructability
 - Surface disruptions and traffic
 - Permitting (outfalls and wetlands)
 - Integration with other city initiatives



Centralville Sewer Separation Draft Plan

- Infrastructure Renewal Coordination
 - Road Restoration
 - Utility Upgrades
- Phase 1
 - Installation of mainline drain
 - Separation of large flows from the sewer system
- Phase 2
 - Installation of sideline drains
 - Sewer separation of the remaining combined sewer area as outlined in **Red**



Consent Decree Capital Planning

- Enhanced Collection System Maintenance
- Inflow and Infiltration Removal Program
- EPA Reporting Requirements
 - CSO Long-Term Plan
- Stormwater Management
 - Ordinance Updates
- Civil Penalty - \$200,000
- Estimated Capital Costs: \$150 - \$200 Million
 - Cost Estimate In Development

Public Integration and Outreach

- LRWWU Will Be Proactively Engaging Lowell Residents
 - Sewer Use Survey is Launched (<https://www.lowellma.gov/637>)
 - Mailers will be sent for notification
 - Neighborhood Association Meetings
 - Website and social media updates
- Public Input will help guide our plan and our priorities

